

JC971 U.S. PRO  
09/954970  
09/19/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION FOR LETTERS PATENT

BE IT KNOWN THAT I, Juan Felipe Montoya, a resident and citizen of the Republic of Columbia, have invented a certain new and useful improvement in a Dual Pizza Pie Container System, of which the following is a Specification.

BACKGROUND OF THE INVENTION

1. Area of Invention:

The present invention relates to pizza boxes and pizza box systems that are particularly adapted for the containment and delivery of more than a single pizza pie.

2. Prior Art:

The prior art of pizza containers capable of holding two or more pizza pies is very limited and, to the knowledge of the within inventor, consists of U.S. Patent No. 5,725,146 (1998) by Luberto, entitled Box With Raised Structurally Enhanced Top Cover Having Vent Openings; and No. 5,950,912 (1999) entitled Dual Pizza Pie Box, by Economopoulos. The instant invention is also an improvement over my Columbian patent issued in March, 2001.

A problem in pizza boxes and containers of the present type has been that of providing adequate venting and stability for each of the levels of pizza containments therein. Said patent to Luberto offers one solution, however, one which results in a highly complex and therefore expensive pizza box container. Said patent to Economopoulos teaches the use of an essentially solid rectangular box for the transporting of two pizza pies in a vertically stacked formation in which the box is provided with corner shelf supports for the positioning of a second or third pizza pie. To achieve this result, a complex pattern of cutting and scoring of the pizza box blank is necessary. Also, there is no assurance that the corner shelf supports of the system of Economopoulos will successfully support the upper pies in the event of tilting or vibration of the pizza box. For these reasons, neither Luberto nor Economopoulos provides a practical solution to the long felt need in the art for a single pizza box container capable of accommodating and rendering practical the delivery of two or more pizza pies.

SUMMARY OF THE INVENTION

There is herein provided a dual pizza pie container system comprising a solid rectangular enclosure and a pizza support platform proportioned for placement within said enclosure. More particularly, the enclosure comprises (i) a substantially square bottom base comprising at least three peripheral sidewalls foldably integral with said base, each width of each sidewall generally defining a height of said enclosure; and (ii) a top cover comprising a base and four sidewall, one thereof integral to both an edge of said base of said top cover and to an edge of said bottom base, said fourth side wall having at least one aperture therein. Said pizza support platform includes four foldable equilateral flaps which, when folded to generally right angles relative to a central base thereof, define an irregular octahedron having four long edges respectively defining a virtual square and four alternating diagonal edges at corners of the support platform when folded, said base of said platform proportioned for placement within said bottom base and said sidewalls of said enclosure when assembled. At least one of said equilateral flaps is provided with at least one aperture therein which, upon assembly of the system, effects registration with said at least one aperture of said fourth sidewall of said top cover, in which widths of said equilateral sidewalls of said platform define about one-half of the height of the sidewalls of said enclosure. Thereby, upper and lower interior solid horizontal compartments, one above and one below said platform, are defined when said support platform is positioned within said enclosure and said enclosure is fully

closed. Said diagonal edges of said support platform facilitate manual engagement thereof, and said apertures within the system facilitate escape of steam from both upper and lower horizontal compartments of the resultant structure.

It is accordingly an object of the present invention to provide a dual pizza pie containment system using commonly available materials such as corrugated cardboard.

It is another object to provided a system of the above type to enable a reliable means of simultaneous transport of at least two pizza pies within a minimum volume, without deterioration of the pies during the transport thereof, and stability of the pies therein.

It is a further object of the invention to provide a system of the above type in which corrugated cardboard blanks thereof may be readily assembled, conveniently transported, and simply opened and used by the customer after delivery.

It is a yet further object to provide a dual pizza pie container of the above type which assures substantially hermetic closure thereof while also permitting a sufficient escape of steam to assure that the pies will not deteriorate during

transport as a result of undue accumulation of steam pressure within the container itself.

The above and yet other objects and advantages of the present invention will become apparent from the hereinafter set forth Brief Description of the Drawings, Detailed Description of the Invention and Claims appended herewith.

卷之三

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is an exploded view showing the respective positioning of the pie support platform and the pie enclosure prior to positioning of second-level creating platform upon the base of the enclosure.

Fig. 2 is a top view of the pie support platform prior to folding of the flaps thereof to a right angle relative to the base of said platform.

Fig. 3 is a front perspective view of a partially closed box.

Fig. 4 is a rear diagonal perspective view of a fully assembled pizza pie container system showing an air vent aperture thereof.

Fig. 5 is a vertical cross-sectional view taken along line 5-5 of Fig. 4 showing the respective upper and lower pie-containing compartments of the system, and further showing the steam vent apertures for the respective upper and lower compartments

Fig. 5A is a view, similar to that of Fig. 5, showing another embodiment of the vent aperture structure.

Fig. 6 is a functional view showing removal of the pie support platform and opening of the enclosure of the system after delivery to a customer.

FIGURE 6 - FIGURE 6

DETAILED DESCRIPTION OF THE INVENTION

With reference to the exploded view of Fig. 1, the inventive dual pizza pie container system may be seen to include a foldable enclosure 10 and a pie support platform 12. When flaps 14 thereof are folded into a substantially normal position relative to a platform portion 16 thereof, said platform and flaps may be readily slip-fitted within sidewalls 18 which depend integrally from a substantially square bottom base 20 of enclosure 10. More particularly, enclosure 10 may be seen to comprise said substantially square bottom base 20, at least three of said peripheral sidewalls 18 which are foldably integral with said base 20. The width of each sidewall 18 generally defines the height of the entire enclosure as may be noted with reference to Fig. 4.

A fourth sidewall 22 is integral both with the rear edge 24 of said square bottom base 20 of the enclosure 10 and with a base 26 of a top cover 25 of the enclosure 10. As may be noted, said fourth sidewall 22 includes at least aperture 28 (see all Figs. 4 and 5) and may also include a second aperture 30. The purpose of which apertures is to permit venting of steam from both lower pizza pie 30 which is disposed upon bottom base 20 and within lower compartment 32 of the resultant structure and an upper compartment 38. See Fig. 5.

F00100200300400500600700800900

In another embodiment of the invention, a smaller vent aperture 128 may be used to facilitate venting of lower compartment 32 only. See Fig. 5A

As may be noted, top cover 25 also includes three sidewalls 34 apart from said fourth sidewall 22. These sidewalls are proportioned in geometry to said three sidewalls 18 which are peripherally integral relative to bottom base 20 such that said sidewalls 34 of top cover 25 may be slipped within bottom base sidewalls 18 in the manner shown in Fig. 5 when the entire system is assembled.

With further reference to said top cover sidewalls 34, there is provided at least one aperture 35 therein proximally to fold line 36 between flap 34 and base 26 of top cover 25 such that, after assembly of the system (see Figs. 5 and 5A), steam from upper compartment 38 emanating from upper pie 40 may vent therethrough.

It is also noted that pie support platform 12 is provided with at least one aperture 42 which is preferably located at fold line 43 between equilateral flap 14 and pie support base 16. In a preferred embodiment, a second such aperture 44 is provided which, upon assembly of the entire system, will be in registration with second aperture 30 of said fourth sidewall 22 of enclosure top 25. See Fig. 1

As may be noted in the top view of Fig. 2, said pie support platform 12, when in its flattened unfolded form, defines an irregular octahedron having four

long edges 46 which alternate with four diagonal edges 48. The benefit of this structure may be appreciated with reference to Fig. 6, which is an illustration of the use of the present system after it has been delivered to a customer. It may, therefrom, be appreciated that after pizza top 25 is opened, diagonal edges 48, in combination with side panels 14 (which acts as legs of the structure) provide a means by which support platform 12 may be readily engaged by the fingers of a user to slide upper pie 40 to the left of lower pie 30 and, therefrom, lift the same away from enclosure 10.

In Fig. 3 and 5 is shown the manner of insertion of sidewalls 34 top cover 25 within sidewalls 18 of the bottom base 20 of the enclosure 10. Due to a slightly greater width, sidewalls 34 of top cover 25 of enclosure 10 versus that of sidewalls 18 of the bottom base 20 of said enclosure, said aperture 35 of sidewall 34 will extend slightly above front sidewall 18 of bottom base 20. See Fig. 5.

To assure added stability of the system, enclosure 10 may be provided with partial sidewalls 50 (see Figs. 1 and 6). Also, top base 26 may be provided with a tab 52 disposed just above said aperture 35 of sidewall 34 will extend slightly above front sidewall 18 of bottom sidewall of bottom base 20, this to enhance convenience of opening of enclosure cover 26. See Figs. 4 and 5.

In order to assure added stability of the system, enclosure 10 may be provided with partial sidewalls 50 (see Figs. 1 and 6).

While there has been shown and described the preferred embodiment of the instant invention it is to be appreciated that the invention may be embodied otherwise than is herein specifically shown and described and that, within said embodiment, certain changes may be made in the form and arrangement of the parts without departing from the underlying ideas or principles of this invention as set forth in the Claims appended herewith.

2025 RELEASE UNDER E.O. 14176